

## **CLAIMS:**

What is claimed is:

1. A wireless transmission method comprising the steps of:

constructing a wireless network including a plurality of wireless transmission apparatuses;

reserving a predetermined transmission band;

carrying out a wireless transmission wherein a desired quality in a wireless transmission is selected by an arbitrary wireless transmission apparatus among said plurality of wireless transmission apparatuses; and

reserving a necessary wireless transmission band.

2. A wireless transmission method according to claim 1, wherein said desired quality in said wireless transmission is selected and said necessary wireless transmission band is reserved by applications of said arbitrary wireless transmission apparatus.

3. A wireless transmission method for use with a wireless network comprising a plurality of wireless transmission apparatuses and on which a predetermined wireless transmission band is reserved and a wireless transmission is carried out, the method comprising the steps of:

measuring a transmission error occurrence situation by a wireless transmission apparatus acting as a receiving station; and

reporting a transmission error occurrence situation to an arbitrary wireless transmission apparatus among said plurality of wireless transmission apparatuses other than the wireless transmission apparatus acting as said receiving station based on said measured results.

4. A wireless transmission method according to claim 3, wherein a modulation system and a convolutional coding ratio serve as parameters for use in carrying out said wireless transmission, the step of reporting a transmission error occurrence situation comprising:

reporting the transmission error occurrence situation to a wireless transmission apparatus acting as a reserving station of a band reserving transmission among said plurality of wireless transmission apparatuses;

the wireless transmission apparatus acting as said reserving station determining the modulation system and convolutional coding ratio parameters used in carrying out said wireless transmission; and

reserving a necessary wireless transmission band.

5. A wireless transmission apparatus according to claim 3, wherein a modulation system and a convolutional coding ratio serve as parameters for use in wireless transmission, and wherein the step of reporting a transmission error occurrence situation comprises:

reporting the transmission error occurrence to a wireless transmission apparatus acting as a control station among said plurality of wireless transmission apparatuses;

the wireless transmission apparatus acting as said control station determining the modulation and convolutional coding ratio parameters used in carrying out said wireless transmission; and

reserving a necessary wireless transmission band.

6. A wireless transmission method according to claim 3, wherein a modulation system and a convolutional coding ratio serve as parameters for use in wireless transmission and wherein the step of reporting a transmission error occurrence situation comprises:

reporting the transmission error occurrence to a wireless transmission apparatus acting as a transmitting station of a band reserving transmission among said plurality of wireless transmission apparatuses;

the wireless transmission apparatus acting as said transmitting station determining the modulation and convolutional coding ratio parameters used in carrying out said wireless transmission; and

reserving a necessary wireless transmission band.

7. A wireless transmission method for use on a wireless network constructed from a plurality of wireless transmission apparatus, the method comprising the steps of:

reserving a predetermined wireless transmission band;

carrying out a wireless transmission wherein a transmission error occurrence situation is measured by a wireless transmission apparatus acting as a receiving station among said plurality of wireless transmission apparatus, a modulation system and a convolutional coding ratio serving as parameters for use in transmission are determined based on the measured results and wherein an arbitrary wireless transmission apparatus other than the wireless transmission apparatus acting as the receiving station among said plurality of wireless transmission apparatus is informed of the modulation system and the convolutional coding ratio serving as the parameters thus determined.

8. A wireless transmission method according to claim 7 further comprising the steps of reporting said modulation system and said convolutional coding ratio thus determined to a wireless transmission apparatus acting as a reserving station of a band reserve transmission among said plurality of wireless transmission apparatus, and reserving a necessary wireless transmission band by the wireless transmission apparatus acting as the reserving station.

9. A wireless transmission method according to claim 7 further comprising the steps of reporting said modulation system and said convolutional coding ratio serving as the parameters thus determined to a wireless transmission apparatus acting as a control station among said plurality of wireless transmission apparatuses, and reserving a necessary wireless transmission band by the wireless transmission apparatus acting as the control station.

10. A wireless transmission method according to claim 7 further comprising the steps of reporting said modulation system and said convolutional coding ratio serving as the parameters thus determined to a transmitting station of a band reserve transmission among said plurality of wireless transmission apparatuses, and reserving a necessary wireless transmission band by said wireless transmission apparatus acting as the transmitting station.

11. A wireless transmission apparatus comprising:  
a wireless network in which a predetermined wireless transmission band is reserved; and  
means for setting a desired transmission quality in a wireless transmission.

12. A wireless transmission apparatus comprising:  
a wireless network in which a predetermined wireless transmission band is reserved;  
a reserving station for carrying out a band reserving transmission;  
means for receiving an instruction from an application of said reserving station for carrying out a band reserving transmission; and  
means for setting a desired transmission quality based on the instruction thus received.

13. A wireless transmission apparatus comprising:

a wireless network is constructed, a predetermined wireless transmission band is reserved and a wireless transmission is carried out and in a wireless transmission apparatus acting as a receiving destination wireless transmission apparatus including a receiving means for receiving the wireless transmission, wherein there are provided; a measuring means for measuring a transmission error occurrence situation and an information transmitting means for reporting a transmission error occurrence situation based on measured results of said measuring means.

14. A wireless transmission apparatus according to claim 13, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to an application of a wireless transmission apparatus acting as a reserving station constructing said network and carrying out a band reservation.

15. A wireless transmission apparatus according to claim 13, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to the wireless transmission apparatus acting as a control station constructing said wireless network.

16. A wireless transmission apparatus according to claim 13, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to a wireless transmission apparatus acting as a transmission source wireless transmission apparatus of a band reserve transmission constructing said wireless network.

17. A wireless transmission apparatus in which a wireless network is constructed, a predetermined wireless transmission band is reserved and a wireless transmission is carried out and in a wireless transmission apparatus acting as a receiving destination wireless transmission apparatus including a receiving means for receiving the wireless transmission, wherein there are provided; a measuring means for measuring a transmission error occurrence situation, a determining means for determining a modulation system and a convolutional coding ratio serving as parameters for use in wireless transmission and an information transmitting means for reporting said modulation system and said convolutional coding ratio serving as the parameters thus determined.

18. A wireless transmission apparatus according to claim 17, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to a wireless transmission apparatus acting as a control station constructing said wireless network.

19. A wireless transmission apparatus according to claim 17, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to an application of a wireless transmission apparatus acting as a reserving station constructing said wireless network and which carries out a band reservation.

20. A wireless transmission apparatus according to claim 17, wherein a reporting means is provided for reporting the transmission error occurrence situation measured by said measuring means to a wireless transmission apparatus acting as a transmission source wireless transmission apparatus of a band reserve transmission constructing said wireless network.

21. A wireless transmission apparatus constructing a wireless network and in which a predetermined wireless transmission band is reserved and a wireless transmission is carried out, wherein there are provided; a receiving means for receiving an error occurrence situation in a band reserve transmission from a wireless transmission apparatus acting as a receiving destination wireless transmission apparatus constructing said wireless network and means for issuing a band reserve additional allocation request based on the report thus received.

22. A wireless transmission apparatus constructing a wireless network and in which a predetermined wireless transmission band is reserved and a wireless transmission is carried out and which acts as a control station, wherein means for carrying out a band reserve allocation of a necessary wireless transmission band is provided.